

DUSP10, human recombinant

CATALOG #: 7814-50 50 µg

ALTERNATE NAMES: Dual specificity protein phosphatase 10, MKP5

SOURCE: E. Coli

PURITY: > 90% by SDS - PAGE

MOL. WEIGHT: 40.4 kDa (359 aa, 149-482 aa + His Tag)

FORM: Liquid

FORMULATION: 0.25 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 50% glycerol, 0.2 M NaCl and 2 mM DTT

STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION:

DuSP10 (Dual specificity protein phosphatase 10) belongs to the protein-tyrosine phosphatase family. Dual specificity protein phosphatases (DuSPs) inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the MAPK superfamily (MAPK/ERK, SAPK/JNK, p38), which is associated with cellular proliferation and differentiation. DuSP10 has been shown to interact with MAPK14 and MAPK8. When expressed in mammalian cells, DuSP10 blocks the enzymatic activation of MAP kinases with the selectivity p38 approximately JNK/SAPK >> ERK. Recombinant human DuSP10 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

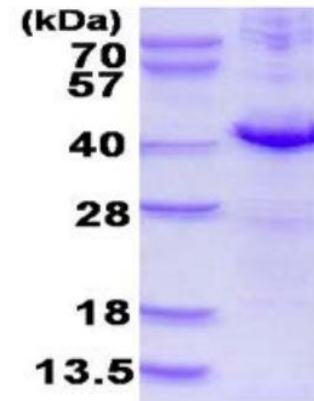
AMINO ACID SEQUENCE:

MGSSHHHHHH SGLVPRGSH MGSMMIYPN DLAKKMTKCS KSHLPSQGPV
 IIDCRPFMEY NKSHIQGAVH INCADKISRR RLQQGKITVL DLISCREGKD SFKRIFSKEI
 IVYDENTNEP SRVMPSQLH IVLESLKREG KEPLVLKGG LSSFKQNHENL CDNSLQLQEC
 REVGGGASAA SLLPQPIPT TPDIAEALT PILPFLFLGN EQDAQDLDTM QRLNIGYVIN
 VTTHLPLYHY EKGLFNYKRL PATDSNKQNL RQYFEEAFEF IEEAHQCGKG LLIHCQAGVS

RSATIVIAYL MKHTRMTMTD AYKFVKGKRP IISPNLNFMG QLLEFEEDLN NGVTPRILTP
 KLMGVETTV

BIOLOGICAL ACTIVITY:

Specific activity is > 1600 unit/mg. Enzymatic activity was confirmed by measuring the amount of enzyme hydrolyzing 1 nmole of p-nitrophenyl phosphate (pNPP) per minute at 37°C, pH 7.5 using 10 mM of substrate.



15% SDS-PAGE (3µg)

Human Recombinant DUSP10

RELATED PRODUCTS:

- DUSP3, human recombinant (Cat. No. 6371-100)
- DUSP18, human recombinant (Cat. No. 7815-50)
- DUSP21, human recombinant (Cat. No. 7816-50)
- DUSP23, human recombinant (Cat. No. 7817-50)

FOR RESEARCH USE ONLY! Not to be used in humans.

